

CLAIMS

- 1 A sealing-enhancing coating for a gasket or a portion of a gasket, characterised in that the coating comprises flaky particles of chemically exfoliated vermiculite, at least 90% by weight of said particles having a thickness of no more than 30 microns, and no dimension greater than 1mm, the particles forming 10 to 90 wt% of the coating, the coating also comprising 50 to 10 wt% of an organic polymer binder which is heat resistant to at least 300°C.
- 2 A coating according to claim 1, characterised in that the polymer binder is a silicon-containing polymer.
- 3 A coating according to claim 2, characterised in that the polymer binder is a silicone.
- 4 A coating according to claim 2, characterised in that the polymer binder is a silicate.
- 5 A coating according to claim 1, characterised in that the polymer binder is selected from PTFE, phenolics, and fluoroelastomers.
- 6 A coating according to any one of claims 1 to 5, characterised in that the coating contains more of the organic polymer binder by weight than of the chemically exfoliated vermiculite.
- 7 A coating according to any one of claims 1 to 6, characterised in that the coating also comprises particles of a solid lubricant.
- 8 A coating according to any one of claims 1 to 7, characterised in that the coating also comprises a flaky filler.

- 9 A coating according to any one of claims 1 to 8, characterised in that the coating also comprises a supplementary inorganic binder.
- 10 A coating according to claim 9, characterised in that the supplementary inorganic binder is lithium silicate.
- 11 A coating according to any one of claims 1 to 4, characterised in that the coating also comprises a waterproofing agent acting on at least one of the chemically exfoliated vermiculite and the supplementary inorganic binder.
- 12 A coating according to any one of claims 1 to 11, characterised in that the coating has a thickness up to 80 microns.
- 13 A coating according to any one of claims 1 to 12, characterised in that the coating has a density of below 70% of the theoretical density of the material forming the coating.
- 14 A method of forming a gasket characterised in that the method comprises applying a coating according to any one of claims 1 to 13 to at least a portion of a metal sheet, embossing the metal sheet with the coating to form at least one resilient ridge therein with the coating extending across said ridge, and heating the embossed sheet to a temperature of at least 350°C to temper said sheet.
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